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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 15

Application Number: 10/051,003
Filing Date: January 18, 2002
Appellant(s): Marks et al.

David J. Zobkiw
For Appellant

EXAMINER'S ANSWER

This is in response to appellant's brief on appeal filed on July 9, 2003.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

None

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

No Amendment was filed after the Final Rejection.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Claims 3, 7, and 9 do not stand or fall together.

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

6,494,290	Jessberger	12-2002

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 3, 7, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Jessberger (U.S. Patent 6,494,290).

Re claim 3, as shown in Figures 2 and 3, in a system having a multi-speed engine with an air inlet line (1) connected to the engine, Jessberger discloses a Helmholtz resonator structure comprising:

- a closed chamber (9) configured as a single dead end side branch connected to the inlet line and defining a Helmholtz resonator continuously operatively connected to the inlet line via a restricted connection (7); and

- means (10, 7) for attenuating noise in a plurality of frequencies by changing the frequency response of the Helmholtz resonator responsive to changes in speed of the engine (also see Figures 5 and 6);

wherein the means for changing the frequency response includes at least one restricted connection (7) which is selectively connected between the chamber and the inlet line (connection (7) is selectively opened or closed (lines 8-15 of column 3)).

Re claim 7, as shown in Figures 2 and 3, Jessberger discloses a system having a multi-speed engine with an inlet line (1) connected to the engine, microprocessor means (not shown but inherently must have) for controlling the speed of the engine, the improvement comprising:

- a closed chamber (9) configured as a single dead end side branch connected to the inlet line and defining a Helmholtz resonator continuously operatively connected to the inlet line via a restricted connection (7); and

- means (10, 7) for attenuating noise in a plurality of frequencies by changing the frequency response of the Helmholtz resonator responsive to changes in speed of the engine (also see Figures 5 and 6);

wherein the means for changing the frequency response includes at least one restricted connection (7) which is selectively connected between the chamber and the inlet line (connection (7) is selectively opened or closed (lines 8-15 of column 3)).

With regard to the preamble directed to "a refrigeration system", a preamble to a claim is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self contained description of the structure not depending for completeness upon the introductory clause. See *Kropa v. Robie, supra at 480.* See also *Ex parte Mott,* 190 USPQ 311, 313 (PTO Bd. of App. 1975). Clearly, the pending base claim 7 does not rely on the preamble for completeness.

Re claim 9, as shown in Figures 2 and 3, Jessberger discloses a system having a multi-speed engine with an inlet line (1) connected to the engine, microprocessor means (not shown but inherently must have) for controlling the speed of the engine, the improvement comprising:

- a closed chamber (9) configured as a single dead end side branch connected to the inlet line and defining a Helmholtz resonator continuously operatively connected to the inlet line via a restricted connection (7); and

- means (10) for attenuating noise in a plurality of frequencies by changing the frequency response of the Helmholtz resonator responsive to changes in speed of the engine (also see Figures 5 and 6);

wherein the means for changing the frequency includes a valve (10) having only an open and a closed position (lines 10-13 of column 3).

With regard to the preamble directed to "a refrigeration system", a preamble to a claim is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self contained description of the structure not depending for completeness upon the introductory clause. See *Kropa v. Robie, supra at 480.* See also *Ex parte Mott*, 190 USPQ 311, 313 (PTO Bd. of App. 1975). Clearly, the pending base claim 9 does not rely on the preamble for completeness.

(11) Response to Argument

BRIEF BACKGROUND OF JESSBERGER:

Jessberger discloses several embodiments of noise suppressor in the intake path of an internal combustion engine. Each of these noise suppressors is also known as a Helmholtz resonator. As illustrated in Figures 2 and 3, Jessberger discloses an embodiment of a Helmholtz resonator structure comprising a closed chamber (9) configured as a single dead end side branch connected to an inlet line (1) and defining a Helmholtz resonator, at least two restricted connections (7, 8) connected the chamber to the inlet line, and a pivotable flap (10) to at least selectively open or close each of the restricted connections for attenuating noise in a plurality of frequencies by changing the frequency response of the Helmholtz resonator in response to changes in speed of the engine.

ISSUE 1: With regard to the 35 U.S.C. 102 rejection of claims 3, 7, and 9, Jessberger fails to disclose a Helmholtz resonator which is continuously operatively connected to the inlet line via a restricted connection.

In response to appellant's argument that Jessberger fails to disclose "a Helmholtz resonator which is continuously operatively connected to the inlet line via a restricted connection" (bottom of page 4 to page 5 of Appeal Brief), the examiner respectfully disagrees.

The phrase "continuous" is defined in a dictionary as "marked by uninterrupted extension in space, time, or sequence". Thus, in a view point of time (emphasis added), as shown in Figure 2, the closed chamber (9) in Jessberger defines a Helmholtz resonator which is continuously operatively connected to the inlet line (1) via a restricted connection (7) to reduce noise in the engine at all times (or for an uninterrupted extension of time), regardless if the connection (7) is opened or closed. Claims in a pending application are given their broadest reasonable interpretation. See *In re Pearson*, 181 USPQ 641 (CCPA 1974). Thus, in the broadest reasonable interpretation of claims 3, 7, and 9, Jessberger clearly discloses a Helmholtz resonator which is continuously operatively connected to the inlet line (1) via a restricted connection (7).

Appellant further argues that the claim feature of means plus function in claims 3 and 7 recites a positive limitation of a second restricted connection (emphasis added) which is selectively connected between the chamber and the inlet line. And this second restricted connection is different from a first restricted connection (emphasis added) which is continuously

operatively connected between the chamber and the inlet let (page 5 of Appeal Brief). The examiner again respectfully disagrees with this argument.

In claim 3 or 7 of the pending application, there is only one means plus function limitation. This limitation recites "a restricted connection which is selectively connected between the chamber and the inlet line". The limitation that recited "a restricted connection which is continuously operatively connected between the chamber and the inlet line" is not a means plus function limitation. Thus, based on the means plus function limitations and because of the absence of the phrases "first" and "second" in these claims, the examiner has determined that the limitations in claim 3 or 7 fail to specify two restricted connections for any embodiment in the pending application. Moreover, in the English language, there is no limit to the number of adverbs required or needed to describe or modify a verb. Thus, in the broadest reasonable interpretation of claims 3 and 7, the examiner has concluded that the restricted connection (7) in Jessberger is selectively, continuously, and operatively connected between the chamber (9) and the inlet line (1).

In response to Appellant's argument that the references fail to show certain features of applicant's invention, it is noted that the structural features upon which appellant relies (i.e., at least two restricted connections with one connection always open) (top of page 6 in Appeal's Brief) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

ISSUE 2: With regard to the 35 U.S.C. 102 rejection of claim 9, Jessberger fails to disclose a valve having only an open and a closed position.

In response to appellant's argument that Jessberger fails to disclose "a valve having only an open and a closed position" (bottom of page 5 in Appeal Brief), the examiner again respectfully disagrees.

As indicated on lines 10-13 of column 3, with regard to opening and closing of the restricted connections (7, 8), the valve (10) in Jessberger has only an open and a closed position. This is further confirmed by analyzing Figure 3. As can be seen, the design of valve (10) makes it impossible to either open or close both restricted connections (7, 8). The phrase "or also both can be opened or closed" on line 14 of column 3 clearly indicates a design feature of a different valve for a different embodiment because of the word "or" at the beginning of the phrase.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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September 19, 2003

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